

entitled "Version With Markings to Show Changes Made," showing the current amendments to the title, specification, and claims is attached hereto.

Please amend the above-identified application as follows:

IN THE TITLE:

Please delete the title and insert the following:

**IMAGE SEARCHING SYSTEM, IMAGE SEARCHING METHOD,
AND RECORDING MEDIUM STORING AN IMAGE
SEARCHING PROGRAM**

IN THE SPECIFICATION:

Delete the paragraph beginning at page 25, line 7, and ending at page 25, line 12, and replace with the following:

Next, the processing for calculating the degree of similarity (step S46 in Fig. 6) is described below. Based on the common features extracted from the key images and a target image, this processing calculates the degree of similarity of the target image to all key images or any one of them.

Delete the paragraph beginning at page 25, line 17, and ending at page 25, line 25, and replace with the following:

Accordingly, features other than common features are not used for the calculation of the degree of similarity. Due to this, images having features common to plural key images can be obtained as the results of the search with a high accuracy. In this case, the target image is similar to all of the plural key images. In other words, this search method imposes a search under an AND condition among the key images and thereby, enables a user to restrict ranges of searching conditions to reasonable ones.

Delete the paragraph beginning at page 26, line 1, and ending at page 26, line 18, and replace with the following:

Fig. 11 shows an example of the calculation for the degree of similarity. In this example, the distance between each key image and the target image is calculated based on the values of feature quantity 2 and feature quantity 3 selected as the common features and the degree of similarity is obtained based on the calculated distances. The values shown in Fig. 11 are obtained from the following equations (1) to (3).

Difference between features = | (key image feature quantity)-(target image feature quantity) | (1)

Distance = square root of {the sum of (each feature quantity difference)²} (2)

Degree of similarity = 1.0/distance (3)

Delete the paragraph beginning at page 26, line 19, and ending at page 27, line 7, and replace with the following:

According to a second embodiment, the degree of similarity between a target image and key images is calculated for each of the key images based on features of all kinds. From the degrees of similarity calculated for each key image, the highest degree of similarity is then selected as the degree of similarity of the target image to the corresponding key image. In this case, images similar to at least one of the plural key images are searched. That is, the image search is performed under an OR logic condition and, accordingly, it becomes possible to broaden the ranges of searching conditions by increasing the number of key images. The second embodiment performs a processing shown in Fig. 12 and Fig. 13 instead of Figs. 6 and 7 of the first embodiment.

Delete the paragraph beginning at page 27, line 8, and ending at page 27, line 13, and replace with the following:

Referring to Fig. 12, a plurality of key images specified by a user are read [at first] (S141). Features are obtained from the image database 50 for each key image (S142). Namely, features of plural kinds such as color, shape, texture and the like are obtained from each key image.

Delete the paragraph beginning at page 27, line 21, and ending at page 28, line 10, and replace with the following:

At first, it is determined whether or not there is a target image in the image database for which the degree of similarity to each key image has not yet been calculated (step S143). If such a target image is present in the image database 50, the features for that target image are read from the image database (step S144). Then, calculation of the degree of similarity indicative of the similarity between images is performed based on the features of each key image and those of the target image (step S144). After this calculation, the processing loops back to step S143. This calculation processing of the degree of similarity (step S145) will be described later. These steps S143 to S145 are repeated until the similarity calculation has been completed for all target images in the image database 50.

Delete the paragraph beginning at page 29, line 11, and ending at page 29, line 16, and replace with the following:

As shown in Fig. 14, a distance between a feature quantity of the key image and that of the same kind of the target image is calculated for each of all the features, and a distance between the key images and the target image is calculated based on the distances of respective features.

Delete the paragraph beginning at page 31, line 5, and ending at page 31, line 12, and replace with the following:

An example of the calculation of the degree of similarity is shown in Fig. 15. In this example, the weight for the degree of similarity α calculated in Fig. 11

is set larger than that for the degree of similarity b calculated in Fig. 14. A weighted mean value is then calculated to obtain the final degree of similarity c . This final degree of similarity c is obtained according to the next equation (7).

Delete the paragraph beginning at page 31, line 16, and ending at page 32, line 6, and replace with the following:

As stated above, according to the present embodiment, features are extracted from a plurality of key images, when specified and those common to the plural key images are selected to determine similarity between images using these common features. Thus, the common features are automatically determined from among plural key images and accordingly, the user burden can be reduced. It is also possible to search for images having features common to plural key images. This enables the user to narrow the ranges of respective searching conditions by specifying plural key images. Also, the search can be similarly expanded to broader ranges of searching conditions by considering the degree of similarity indicating similarity of an image to at least one of plural key images. Search accuracy can be thus improved.

IN THE CLAIMS:

Please replace the previous version of the claims with the following clean version, wherein claims 1-30 incorporate new amendments thereto, and claims 31-33 have been added.